

**REMARKS**

This Amendment, submitted in response to the Office Action dated March 13, 2006, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-24 are now all pending in the present application.

**I. Preliminary matters**

Applicant respectfully requests that the Examiner acknowledge receipt of the priority documents filed April 12, 2004.

Further, Applicant requests that the Examiner indicate acceptance of the drawings by marking the appropriate box in the next Office Action.

**II. Rejection of claims 1-4, 6, 10-13, and 17-18 under 35 U.S.C. § 103**

Claims 1-4, 6, 10-13, and 17-18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Lien et al. (U.S. Patent No. 5,386,567) in view of Clark (U.S. Patent No. 5,448,045).

Lien is directed to inserting and removing an adapter while the computer system remains fully operational. See col. 2, lines 64-67. Lien purportedly addresses the problems in the prior art in which a computer system must be powered off while an adapter is attached and subsequently repowered on, rebooted, and resequenced to the application state it was in before the power was turned off. See col.1, lines 27-33.

Claim 1 recites “at least one interface card, detachably mounted in the extension slot, operable to **load built-in driver programs and environmental setting values to the operating system when the computer system is booted** in a state that the interface card connects with the extension slot.”

However, the computer system of Lien is not in a booted state. In particular, the addition of an adapter in Lien occurs when a computer is fully powered up and initialized and is running or is immediately capable of running an application program. See col. 4, lines 63-65. Therefore, at no point would any kind of built-in driver programs or environmental setting values be loaded to the operating system when the computer is booted, since the focus of Lien is to attach an adapter while the computer is in a fully running state.

The Examiner appears to concede this point and therefore asserts that Clark, col. 9, lines 26-38 and Fig. 8, teaches that when a system is booted in a state that an expansion card connects to an expansion slot, the expansion BIOS is loaded from the expansion card.

Assuming *arguendo* Clark teaches this aspect of the claim, it would not be obvious to modify Lien to include the teachings of Clark. In particular, Lien specifically states that the computer system is in a fully powered up and initialized state and therefore, not in a booted state. Consequently, modifying Lien to include the teachings of Clark would result in a substantial modification of the principle of operation of Lien, evidencing that the Examiner’s reasoning is merely a result of impermissible hindsight. MPEP 2143.01.

For at least the above reasons, claim 1 and its dependent claims should be deemed allowable. To the extent independent claim 17 recites similar elements, claim 17 should be deemed allowable for at least the same reasons.

**Claim 2**

Claim 2 recites “a memory device operable to store the **driver programs** when said driver programs **make the interface module recognized to the operating system** and the environmental setting values.” The Examiner asserts that adapter attribute information storage 13 teaches the claimed memory device. However, adapter attribute information storage 13 stores attribute information which the Examiner cited for teaching the environmental setting values. There is no teaching or suggestion that the adapter attribute information storage 13 stores driver programs, let alone that the driver programs are stored when the driver programs make the interface module recognized to the operating system.

Consequently, claim 2 should be deemed allowable.

**Claims 3, 6, and 11-13**

Claim 3 recites “wherein the memory device is divided into first and second partitions, and the driver programs and the environmental setting values are stored in the first and second partitions.”

The Examiner asserts that Lien discloses driver programs and environmental settings being stored in a memory on the adapter. However, as indicated above, there is no teaching or

suggestion that driver programs are stored on adapter attribute information storage 13 (memory device as cited by the Examiner).

The Examiner concedes that Lien does not disclose the memory being partitioned and therefore takes Official Notice that memory partitions are common. However, “[i]t is never appropriate to rely solely on “common knowledge” in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based.” MPEP 2144.03.

Therefore, Applicant traverses the Examiner’s taking of Official Notice and requests that the Examiner cite evidentiary support.

Moreover, assuming *arguendo* partitions in a memory are common the Examiner must further show that a memory device is divided into first and second partitions and that driver programs and environmental setting values are stored in the first and second partitions, as recited in claims 3 and 13.

Moreover, the Examiner has not established where “the second partition loads any one of the stored environmental setting values according to a kind of the operation system detected by the scripter file” (claim 6), “the memory device stores therein a driver program corresponding to the operating system” (claim 11) and “the memory device further comprises environmental setting values corresponding to the driver program” (claim 12).

For at least the above reasons, claims 3, 6, and 11-13 should be deemed allowable.

**Claim 4**

Claim 4 recites “wherein the first partition is performed by the operating system when the computer system is booted, and is provided with a scripter file operable to detect information on the operating system.”

The Examiner asserts that Lien teaches the device driver being loaded by a resource manager. The Examiner further asserts that it would have been obvious to a person of ordinary skill in the art to include the resource manager as part of the operating system, citing MPEP 2144.04(V)(B) in support.

In citing MPEP 2144.04(V)(B), the Examiner appears to be asserting that it would be obvious to make the resource manager (cited for teaching the claimed scripter file) integral with the operating system of Lien. However, claim 4 recites that the first partition, and not the operating system, is provided with a scripter file. Moreover, it would not be obvious to make the resource manager integral with the operating system and the Examiner’s reasoning is clearly based on impermissible hindsight.

Consequently, claim 4 should be deemed allowable.

**Claim 10**

The Examiner rejects claim 10 for the same reasons as claim 1. However, claim 10 recites “a connection unit detachably mounted in the extension slot” which is not disclosed in claim 1. Since the Examiner has not established where this aspect of the claim is disclosed in the cited art, claim 10 should be deemed allowable.

**III. Rejection of claims 5, 7, and 14-16 under 35 U.S.C. § 103**

Claims 5, 7, and 14-16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Lien et al. in view of Clark and further in view of Sherer et al. (U.S. Patent No. 5,459,854). Claims 5, 7, and 14-16 should be deemed allowable by virtue of their dependency to claims 1 and 10 for the reasons set forth above. Moreover, Sherer does not cure the deficiencies of Lien and Clark.

**Claim 5**

Claim 5 recites “wherein the first partition is provided with the **driver programs corresponding to the respective operating systems**, and loads any one of the provided driver programs to the operating system **according to a kind of the operating system detected by the scripter file.**”

There is no teaching or suggestion in Lien, Clark or Sherer that a first partition is provided with driver programs corresponding to the respective operating systems. Consequently, claim 5 should be deemed allowable. To the extent claim 15 recites similar elements, it should be deemed allowable for at least the same reasons.

**IV. Rejection of claims 8-9, and 19-20 under 35 U.S.C. § 103**

Claims 8-9, and 19-20 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Lien et al. in view of Clark and Sherer et al. and further in view of Hitz et al. (U.S. Patent No. 5,485,579).

**Claim 8**

Claim 8 recites “wherein the operating system mounts the interface card by the virtual file system, and sets the driver programs and the environmental setting values stored in the interface card in one tree structure in a file system of the operating system.”

The Examiner asserts that Hitz discloses multiple operating systems in which a virtual file system is used to allow for different operating systems. However, the Examiner has not established where an operating system mounts the interface card by the virtual file system.

Consequently, claim 8 should be deemed allowable. To the extent claim 19 recites similar elements, claim 19 should be deemed allowable for at least the same reasons.

Moreover, Applicant requests that the Examiner more particularly identify which aspects of the references are being cited for teaching the claimed elements.

**Claim 9**

Claim 9 recites “wherein the virtual file system analyzes a file format that the interface card has, and connects a file that the interface card has to the tree structure of the file format that the operating system has according to a result of analysis.”

The Examiner asserts that Hitz discloses a tree structure. However, upon reviewing the reference, a tree structure as claimed does not appear to be disclosed in Hitz.

Consequently, claim 9 should be deemed allowable. To the extent claim 20 recites similar elements, claim 20 should be deemed allowable for at least the same reasons.

**V. New Claims**

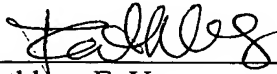
Applicant has added claims 21-24 to provide a more varied scope of protection. Claims 21-24 should be deemed allowable by virtue of their dependency to claim 1 for the reasons set forth above.

**VI. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
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